

## Multiple Eccrine Nevus with Depressed Patches

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*A 2-year-old girl had variably-sized, relatively well demarcated, depressed brownish patches on the left shoulder, back, and both legs from the age of 1 month. The biopsy specimen from the left shoulder showed an increase in the number of normal intradermal eccrine ducts and coils, which was compatible with pure eccrine nevus. The clinical manifestation of our case, including brownish depressed patches, was unique compared to other reported cases.*

**Key Words:** Eccrine nevus, brownish patches

Eccrine nevus is a very rare disorder. The clinical manifestations are variable and they can appear as solitary pore, papule, nodule, tumor, plaque and nevus sudoriferous type.

It is histologically characterized by the increase in the number and/or increase in the size of the eccrine coils, without vessel changes. The eccrine coils are structurally normal. In some cases there is ductal hyperplasia consisting of a thickening of the walls and dilatation of the lumina.

Here, we report a case of eccrine nevus with a clinical manifestation of multiple brownish depressed patches, which is unique compared to previous reports.

### CASE REPORT

A 2-year-old girl visited our dermatologic clinic due to skin lesions on the left shoulder, back, and

both legs from the age of 1 month. Physical examination showed variably-sized, relatively well demarcated, depressed brownish patches on those areas (Fig. 1). We used a hydrometer to test the presence of hyperhidrosis on the left shoulder, which had the skin lesion, and also on the normal right shoulder as a control. Both sides showed no hyperhidrosis and there was no significant difference between them. The complete blood count, urine analysis, liver function test, chest roentgenogram, and electrocardiogram revealed no abnormal findings. The biopsy specimen from the left shoulder demonstrated slight acanthosis of the epidermis, focal hyperpigmentation of the basal layer and an increase in the number of intradermal eccrine ducts and eccrine coils composed of normal secretory and ductal portion (Fig. 2-3).

### DISCUSSION

The clinical manifestations of eccrine nevus are variable, and can appear as solitary pore (Rook *et al.* 1992), papule (Imai and Nitto, 1983), nodule (Oh *et al.* 1993; Sulica *et al.* 1994), plaque (Hyman *et al.* 1968; Tharakaram *et al.* 1983; Mayou *et al.* 1988), and nevus sudoriferous type (Goldstein, 1967).

Received November 13, 1996

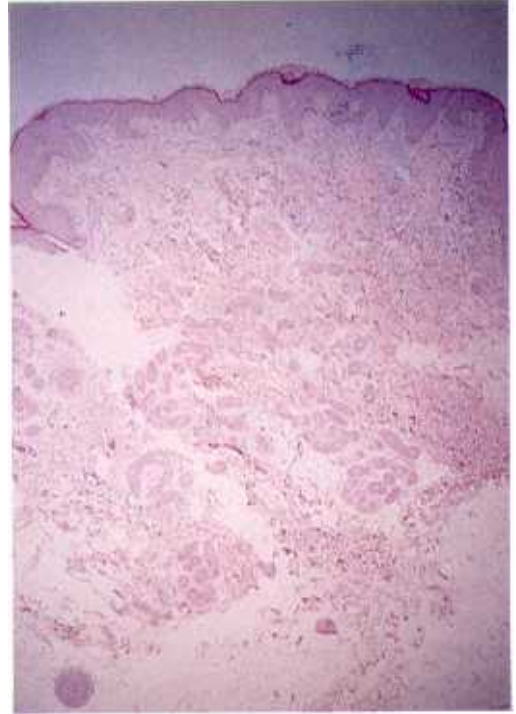
Accepted February 14, 1997

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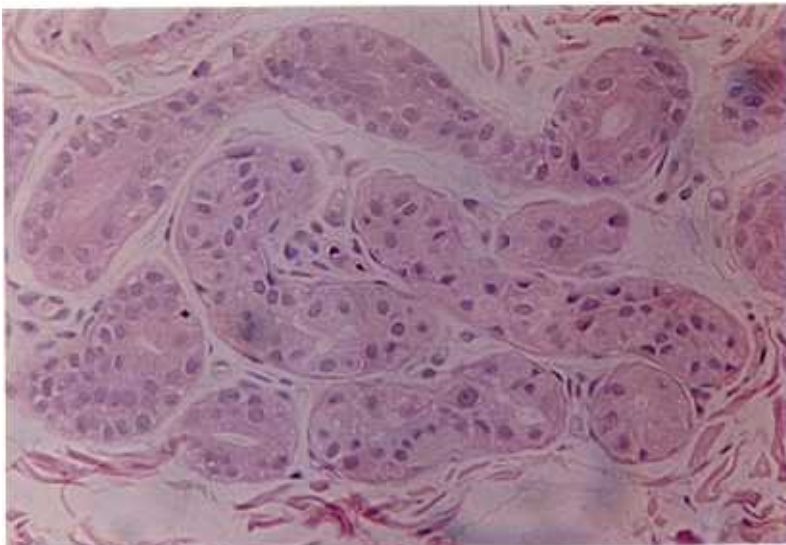
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*Fig. 1. A relatively well demarcated, depressed, brownish patch on the left shoulder.*



*Fig. 2. Increased normal eccrine coils and ducts in the dermis (H&E,  $\times 40$ ).*



*Fig. 3. Coils of eccrine glands composed of normal secretory and ductal portions (H&E,  $\times 200$ ).*

It may take a linear or zosteriform configuration (Imai and Nitto, 1983). While a solitary pore type discharges a mucoid secretion, nevus sudoriferus type shows an unremarkable area of diffusely increased sweat production.

Histologically, eccrine nevi show an increase in the size of the eccrine coil in cases with only one eccrine duct; while in cases with multiple ducts, they show an increase in the number and/or in the size of coils (Lever and Schumburg-Lever, 1990).

Usually, patients of eccrine nevus show hyperhidrosis. However, as our case demonstrates, some cases of eccrine nevi don't show hyperhidrosis despite their increase in eccrine component (Hyman *et al.* 1968; Sulica *et al.* 1994). There may be a very intimate association between the glandular and vascular elements (Rook *et al.* 1992; Zaias and Barden, 1993). In cases with a predominant vascular element, terms such as eccrine angiomatous hamartoma or sudoriparous angioma can be applied (Challa and Jona, 1977; Ahn *et al.* 1981; Kim *et al.* 1982; Tharakaram *et al.* 1983; Mayou *et al.* 1988; Oh *et al.* 1993; Sulica *et al.* 1994). Those patients may complain of spontaneous pain as well as increased sweating (Kim *et al.* 1982; Tharakaram *et al.* 1983). Hair follicles may also be closely associated with the eccrine angiomatous complexes (Rook *et al.* 1992). In that case, the diagnosis of eccrine-pilar angiomatous hamartoma can be made (Zeller and Goldman, 1971).

In Korea, there has been one case report of pure eccrine nevi (Jung *et al.* 1995). The lesions were brownish plaques on the fingers of the left hand with mild hyperhidrosis. In our case, the primary skin lesions were patches which were located in multiple areas and showed no hyperhidrosis. The clinical manifestations of our case, including brownish patches, were unique compared to other reported cases. The biopsy specimen demonstrated an increase in the number of normal intradermal eccrine ducts and eccrine coils, which was compatible with pure eccrine nevus. Our case showed an unusual clinical manifestation, including brownish patches, which

has never before been reported in the literature to our knowledge.

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